ABSTRACT

An absolute pressure sensor for sensing absolute pressure and a differential pressure sensor for sensing a pressure difference between ambient atmospheric pressure and pressure in a load lock chamber are combined together on a manifold and with common circuit components to provide pressure transducer apparatus capable of producing control signals over a wide pressure range for opening interior and exterior doors of a load lock used to shuttle wafers and other devices into and out of a vacuum processing chamber. The transducer can also produce signals to control transition from slow to fast vacuum pump-down of a load lock chamber pressure at a predetermined pressure set point.